

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method for operating a device driver, comprising ~~the steps~~ of:

providing a device driver comprising an encrypted ~~encrypting a~~ program code portion of a main process ~~of a device driver~~ thereof;

decrypting the encrypted program code portion in an initialization process of said device driver;

executing the decrypted program code portion; and

re-encrypting the executed decrypted program code portion ~~after the decrypted~~ program code portion is executed and before in an end process of the device driver, in which said device driver is released.

2. (Currently Amended) A method for operating a device driver, comprising ~~the steps~~ of:

providing a device driver comprising an encrypted ~~encrypting a~~ program code portion of a main process ~~of a device driver~~ thereof;

initializing said device driver;

decrypting the encrypted program code portion after the ~~initialization process~~ device driver is performed initialized;

executing the decrypted program code portion;

re-encrypting the executed decrypted program code portion ~~after the decrypted program code portion is executed~~; and

releasing said device driver in an end process of the device driver, after the re-encrypting of the executed decrypted program code portion.

3. (Currently Amended) A method for operating a device driver, comprising ~~the steps~~ of:

providing a device driver comprising an encrypted ~~encrypting a~~ program code portion of a main process ~~of a device driver with~~ thereof, wherein the encrypted program code portion has been encrypted a first time with a first encryption key and then ~~encrypting~~ encrypted a second time with ~~the encrypted program code portion with~~ a second encryption key;

primarily decrypting the encrypted program code portion ~~that has been encrypted with the first encryption key~~ with a first decryption key in an initialization process of the device driver;

secondarily decrypting the decrypted program code portion ~~that has been encrypted with the second encryption key~~ with a second decryption key after the initialization process is completed;

executing the secondarily decrypted program code portion;

primarily re-encrypting the secondarily decrypted program code portion with the second encryption key ~~after the program code portion is executed~~; and

secondarily re-encrypting the re-encrypted program code portion with the first encryption key ~~after the program code portion is executed and before said device driver is released.~~

4. (Currently Amended) The method as claimed in claim 1, ~~wherein at least one memory area is disposed on~~ further comprising extracting a numeric value from an application; and creating a key, corresponding to the numeric value, for encrypting and decrypting and re-encrypting the program code portion in said encrypting, decrypting and re-encrypting of the program code portion ~~steps is created corresponding to a numeric value stored in one of the memory areas.~~

5. (Currently Amended) The method as claimed in claim 2, ~~wherein at least one memory area is disposed on~~ further comprising extracting a numeric value from an application; and creating a key, corresponding to the numeric value, for encrypting and decrypting and re-encrypting the program code portion in said encrypting, decrypting and re-encrypting of the program code portion ~~steps is created corresponding to a numeric value stored in one of the memory areas.~~

6. (Currently Amended) The method as claimed in claim 1, further comprising performing ~~wherein an authentication is performed~~ between an application and said device driver.

7. (Currently Amended) The method as claimed in claim 2, further comprising performing ~~wherein an authentication is performed~~ between an application and said device driver.

8. (Currently Amended) The method as claimed in claim 1, further comprising:

providing an application, which requests the device driver;

~~wherein before supplying output data to said device driver, an~~ utilizing the application
~~to detect~~ detects whether or not the program code portion of said device driver has been
forged before supplying output data to said device driver, and when the program code portion
of said device driver has been forged, the application stops outputting the output data to
hardware, and

~~wherein before supplying input data to the application, said~~ utilizing the device driver
~~to detect~~ detects whether or not ~~the~~ a program code portion of the application has been forged
before supplying input data to the application, and when the program code portion of the
application has been forged, said device driver stops outputting the input data to the
application.

9. (Currently Amended) The method as claimed in claim 2, further comprising:

providing an application, which requests the device driver;

~~wherein before supplying output data to said device driver, an~~ utilizing the application
~~to detect~~ detects whether or not the program code portion of said device driver has been
forged before supplying output data to said device driver, and when the program code portion
of said device driver has been forged, the application stops outputting the output data to
hardware, and

~~wherein before supplying input data to the application, said~~ utilizing the device driver
~~to detect~~ detects whether or not ~~the~~ a program code portion of the application has been forged
before supplying input data to the application, and when the program code portion of the
application has been forged, said device driver stops outputting the input data to the
application.

10. (Currently Amended) The method as claimed in claim 8,
wherein said device driver does not decrypt ~~the~~ encrypted data of the application, and
wherein only when the program code portion of said device driver has not been
forged, the application decrypts the encrypted data and ~~outputs~~ provides the decrypted data as
the output data to said device driver.

11. (Currently Amended) The method as claimed in claim 9,
wherein said device driver does not decrypt ~~the~~ encrypted data of the application, and
wherein only when the program code portion of said device driver has not been
forged, the application decrypts the encrypted data and ~~outputs~~ provides the decrypted data as
the output data to said device driver.

12. (New) The method as claimed in claim 1, wherein the device driver communicates
between an application arranged at a user level, and hardware arranged at a privilege level.

13. (New) The method as claimed in claim 2, wherein the device driver communicates
between an application arranged at a user level, and hardware arranged at a privilege level.

14. (New) The method as claimed in claim 3, wherein the device driver communicates
between an application arranged at a user level, and hardware arranged at a privilege level.